



# Updated Spring Flood Outlook

February 22, 2022  
12:23 PM



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Atmospheric Administration  
U.S. Department of Commerce

National Weather Service  
Hastings, NE



## Flood Risk This Spring Across South Central Nebraska and North Central Kansas is Generally **Below Normal**

- There is not enough moisture in our recent snowfall to result in any flooding issues.
- Mountain snowpack in the Platte River Basin is near normal and not expected to result in Spring Flooding.
- River ice thickness and frost depth is less than normal given our overall warm winter despite our recent cool down.
- Soil moisture is drier than normal and capable of absorbing plenty of moisture thus limiting spring flood potential.
- Current streamflow on our biggest rivers is averaging below normal.
- The 3 month precipitation outlook indicates a higher likelihood of below normal precipitation.
- Flooding is still possible even in dry years and when the overall risk of flooding is below normal.





# Spring Flood Outlook

South Central Nebraska and North Central Kansas

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## Overall Spring Flood Risk

**\*\* Below Normal \*\***

Contributing Factors	Short Term: 24 Feb - 10 Mar	Long Term: March-May
Local Snowpack	Below Normal	Below Normal
Mountain Snowpack	No short term impact	Normal
River Ice/Frozen Ground	Below Normal	Below Normal
Soil Moisture	Below Normal	Below Normal
Stream Flow	Below Normal	Below Normal
Precipitation Outlook	Equal Chances	Below Normal

## Bottom Line Up Front

- **Snowpack:** Local snowpack is too insignificant to result in any snowmelt induced flooding.
- **River Ice/Frozen Ground:** Some thin river ice has formed over the past few days, but is generally too insignificant to result in ice jams.
- **Soil Moisture:** Abnormally low given ongoing drought conditions.
- **Stream Flow:** Our biggest rivers are generally running with below normal flow.
- **Precipitation Outlook:** The Climate Prediction Center is forecasting below normal precipitation for most of the period.

Impact Level

Below Normal

Normal

Above Normal



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# Precipitation Trends

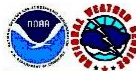
Well Below Normal

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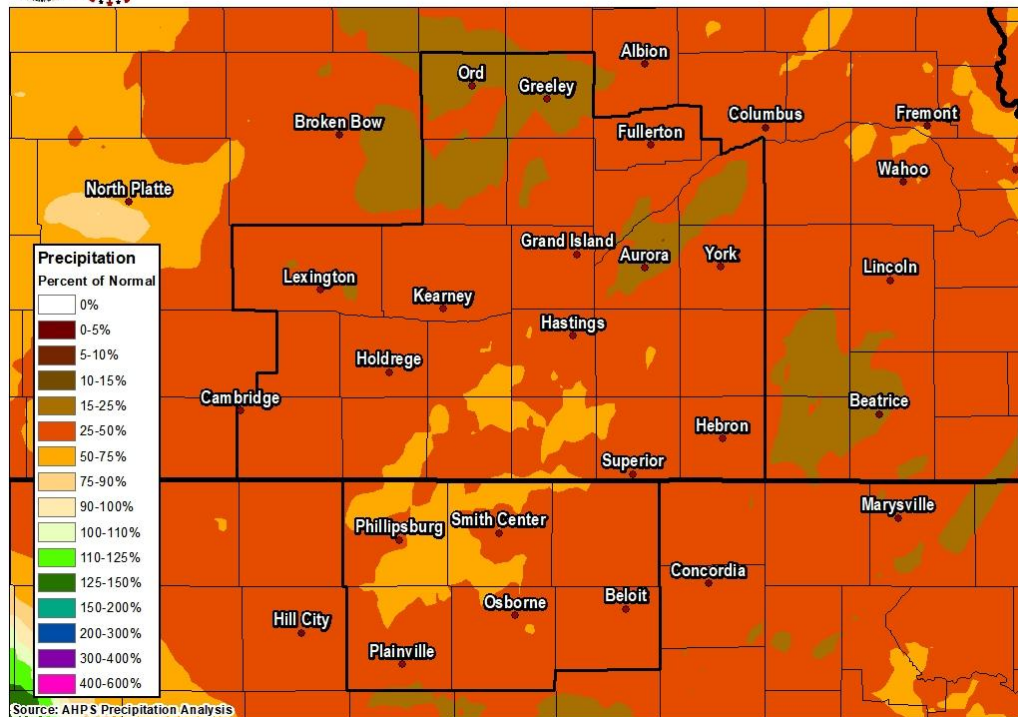
## Key Messages

- Precipitation Last 90 days
- Well below normal (15-50%)



## 90-Day Percent of Normal

As Of 6 AM CST  
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# Platte River Basin Snowpack

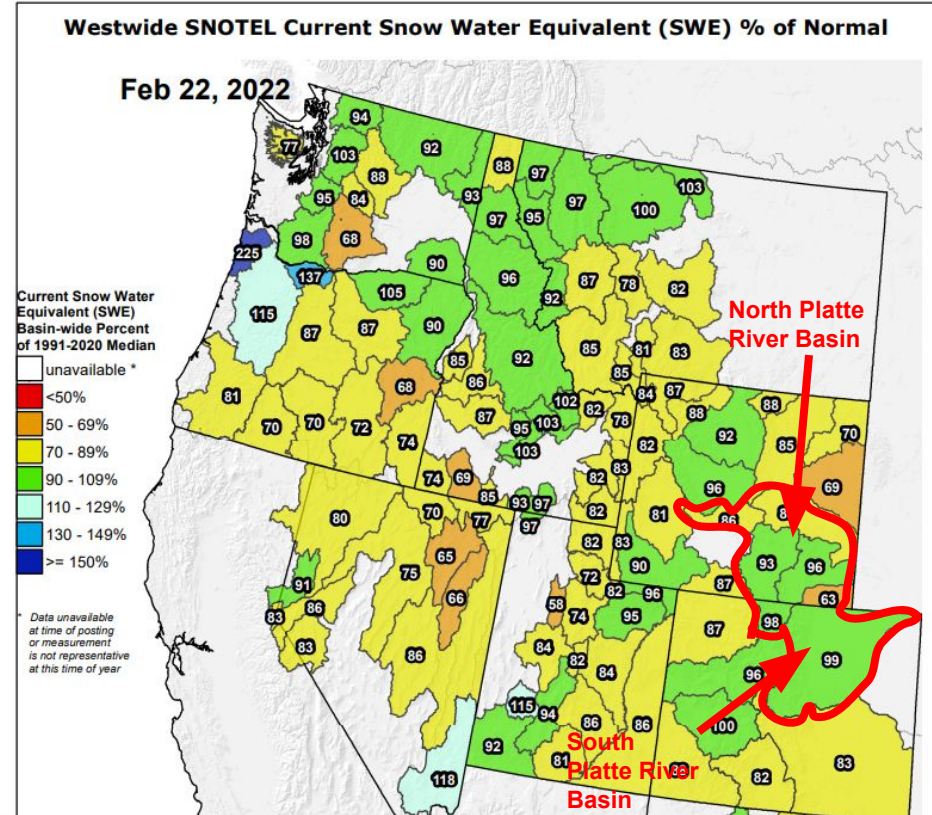
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Near Normal

## Key Messages

- As of late February the mountain snowpack was near normal over the Platte River Basin
- Mountain snowmelt induced flooding is not expected across Central Nebraska



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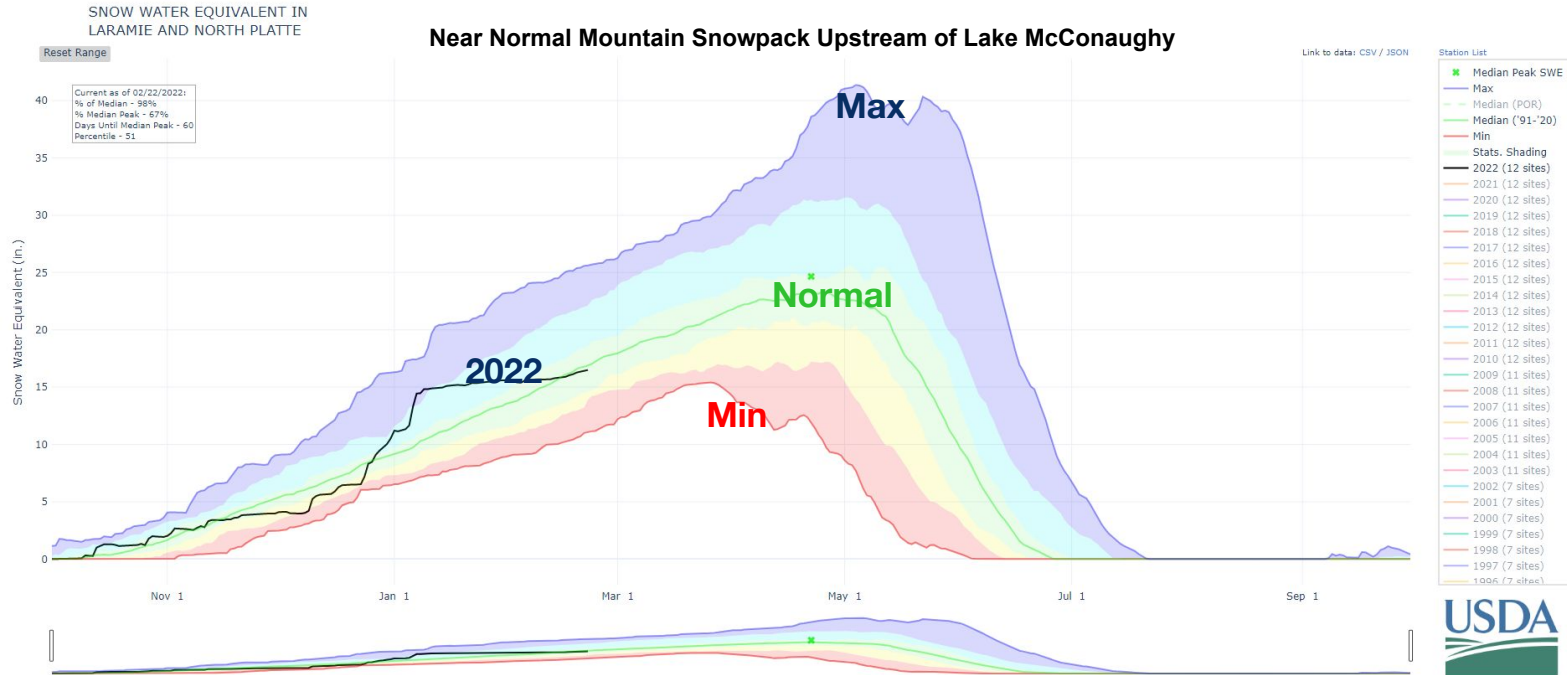


# Platte River Basin Snowpack

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Near Normal

## North Platte River Basin - February 22, 2022



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th Percentiles  
For more information visit: [20-Year Hydroclimatic Normals](https://www.noaa.gov/hydroclimate/normal)



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# Platte River Basin Snowpack

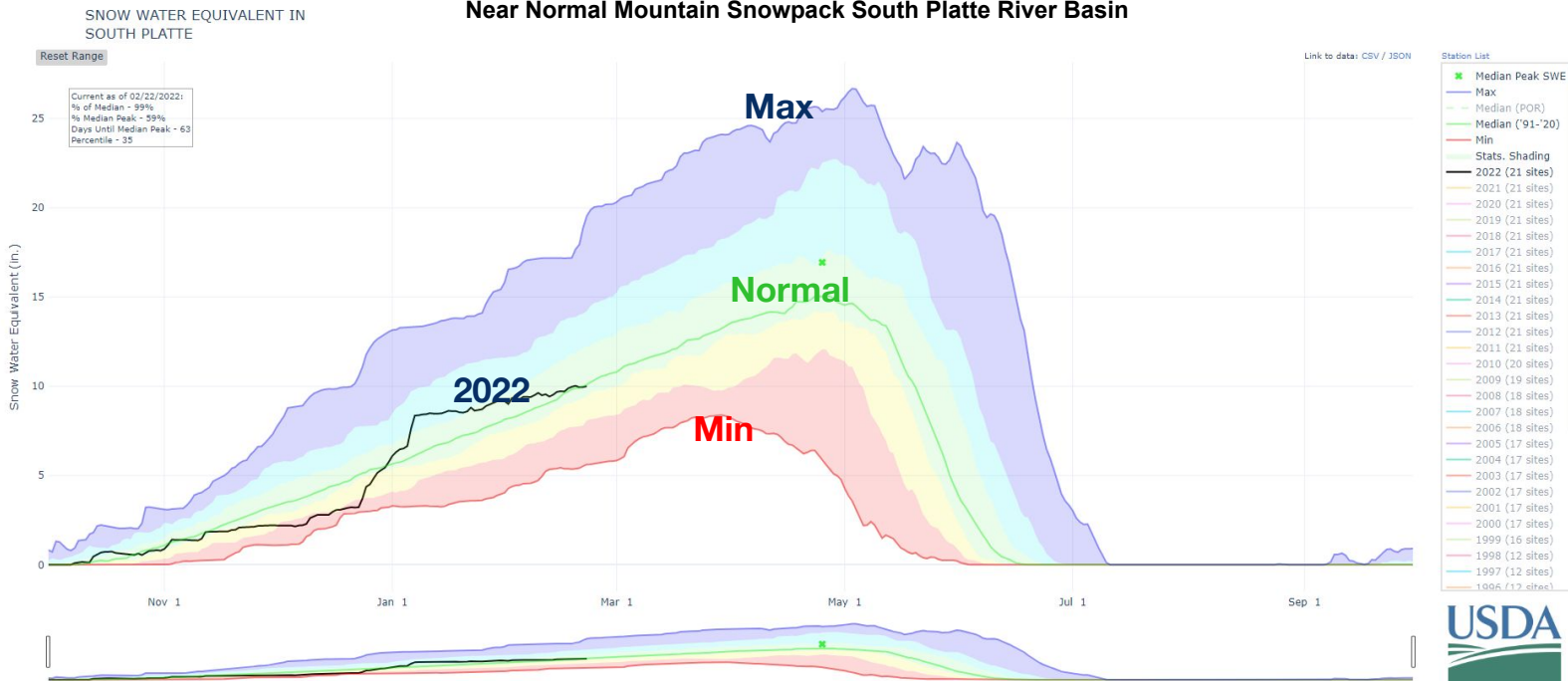
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Near Normal

## South Platte River Basin - February 22, 2022

Near Normal Mountain Snowpack South Platte River Basin



Statistical shading breaks at 10th, 20th, 50th, 70th, and 90th Percentiles  
For more information visit: [20-year Hydroclimatic Normals](#)



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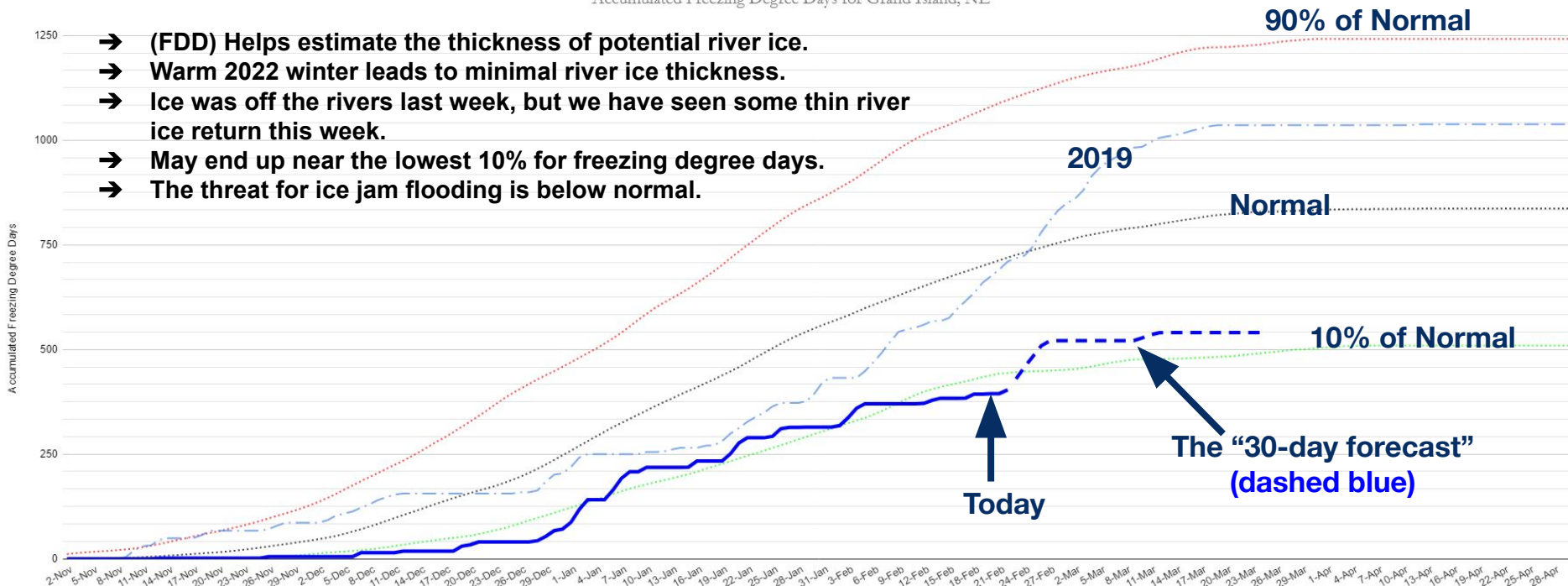
# Freezing Degree Days (FDD)

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Grand Island - Below Normal FDD Means Warmer Than Normal Winter With Less River Ice

Accumulated Freezing Degree Days for Grand Island, NE



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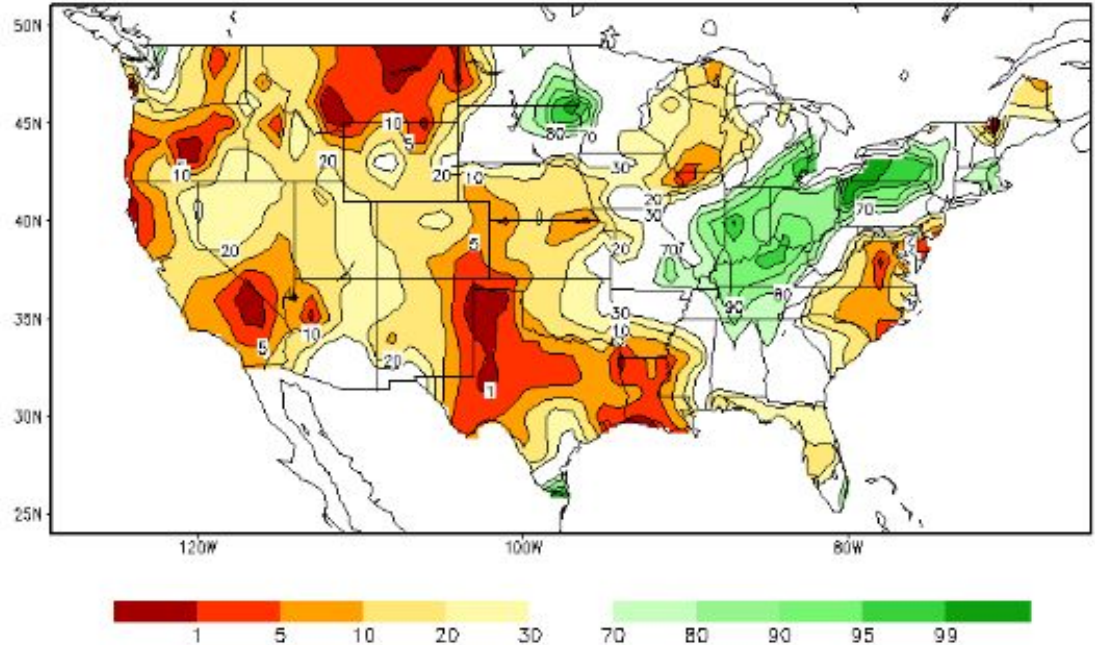
# Soil Moisture

Below Normal

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Calculated Soil Moisture Ranking Percentile  
FEB 21, 2022



## Key Messages

- Below normal soil moisture
- Ground should easily be able to absorb a good deal of moisture





# Drought Monitor

Abnormally Dry to Moderate Drought

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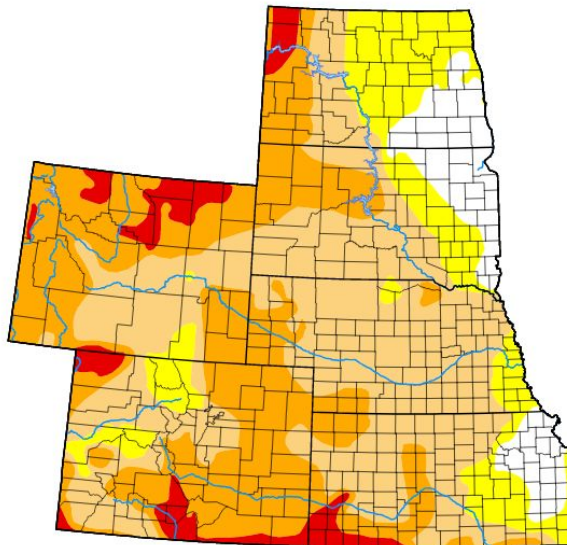
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## High Plains

[Home](#) > High Plains

### Key Messages

- Moderate drought conditions persist
- Ground should easily be able to absorb a good deal of moisture



Map released: Thurs. February 17, 2022

Data valid: February 15, 2022 at 7 a.m. EST

### Intensity

None
D0 (Abnormally Dry)
D1 (Moderate Drought)
D2 (Severe Drought)
D3 (Extreme Drought)
D4 (Exceptional Drought)
No Data

### Authors

United States and Puerto Rico Author(s):

[Brad Pugh](#), NOAA/CPC

Pacific Islands and Virgin Islands Author(s):

[Richard Heim](#), NOAA/NCEI

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying [text summary](#) for forecast statements.*



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# Looking at the Temperature Forecast

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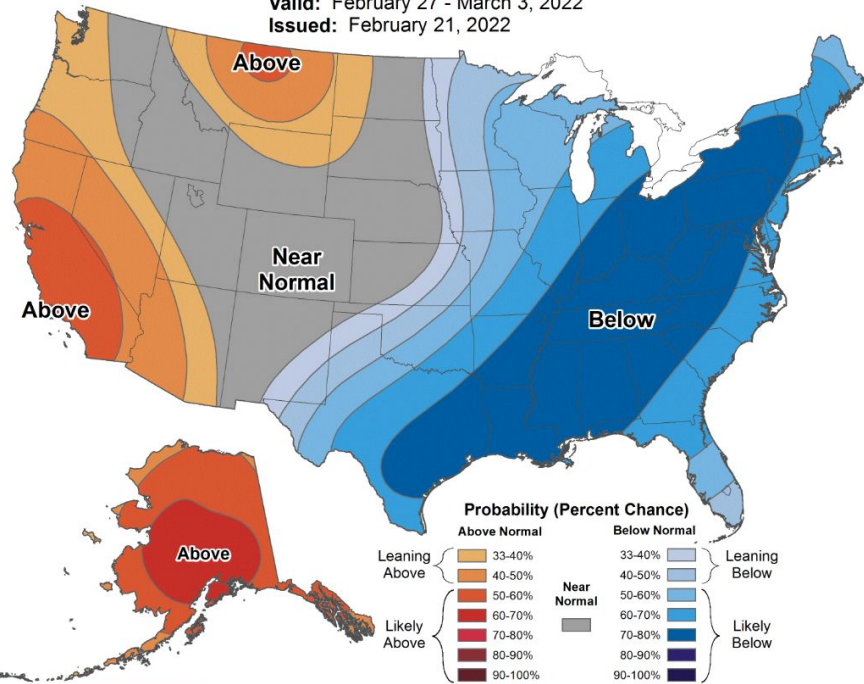
## Near Normal Temperature Outlook Through The Next 2 Weeks



### 6-10 Day Temperature Outlook

Valid: February 27 - March 3, 2022

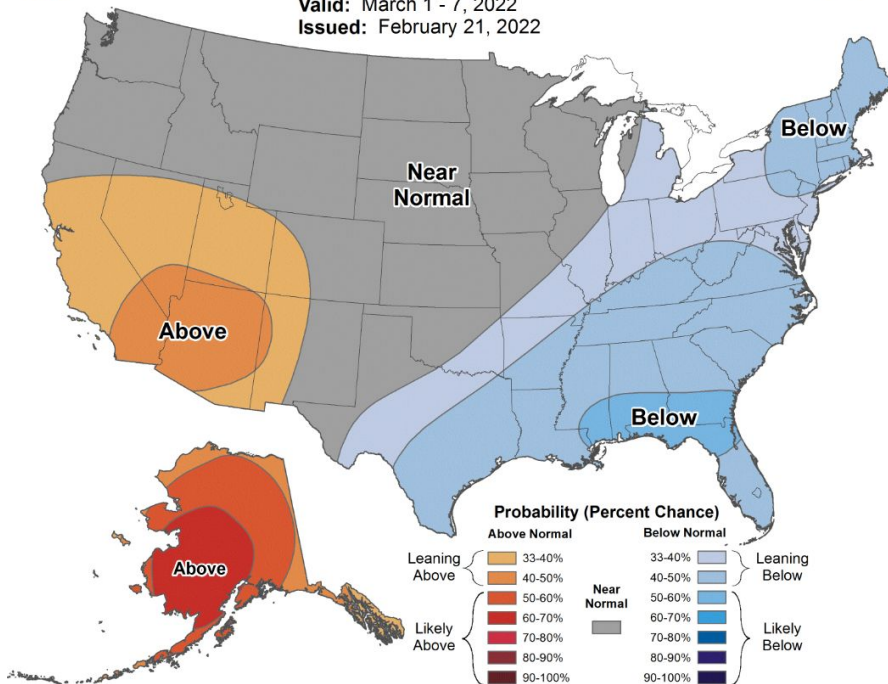
Issued: February 21, 2022



### 8-14 Day Temperature Outlook

Valid: March 1 - 7, 2022

Issued: February 21, 2022



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# Looking at the Precipitation Forecast

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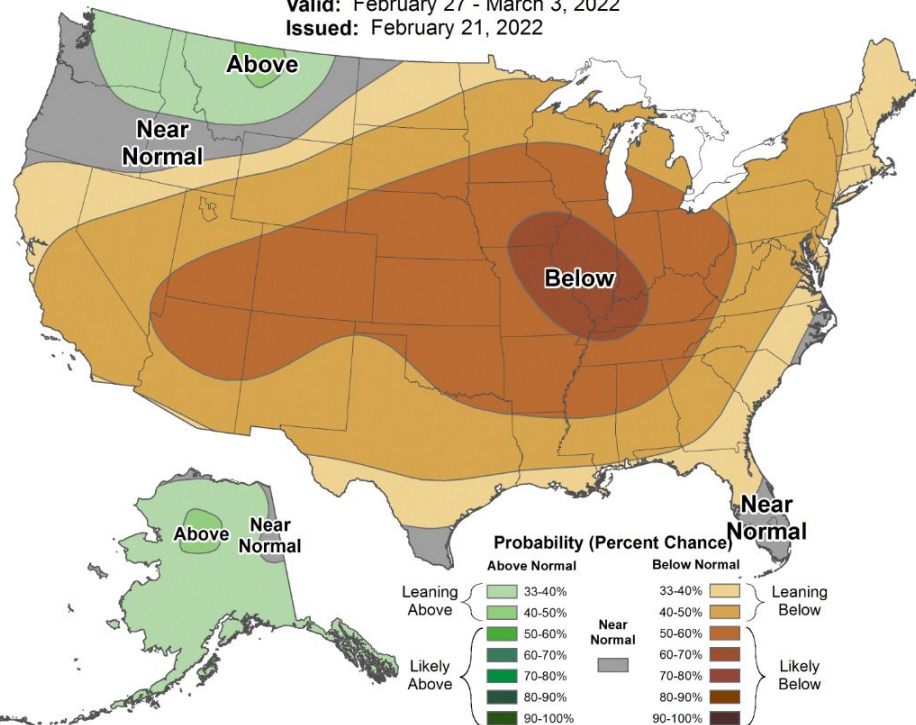
Some Chance Of A Storm System Around March 5-7 Otherwise Pretty Dry



## 6-10 Day Precipitation Outlook

Valid: February 27 - March 3, 2022

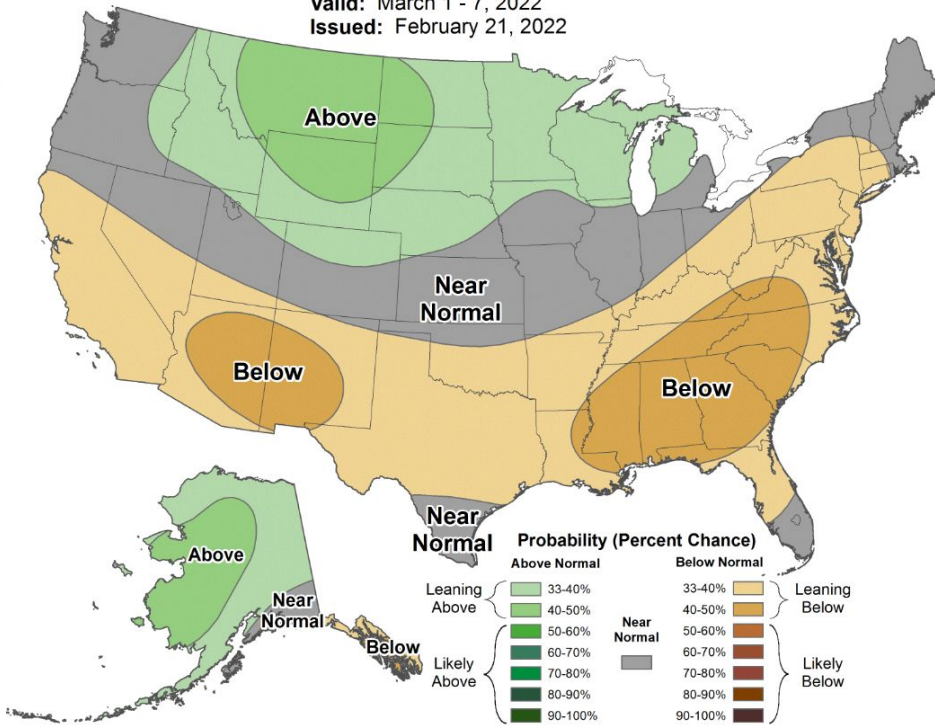
Issued: February 21, 2022



## 8-14 Day Precipitation Outlook

Valid: March 1 - 7, 2022

Issued: February 21, 2022



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# Looking at the 3-4 Week Forecast

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Another cold snap beginning around March 5-7 with a chance for precipitation (precip uncertainty is high)

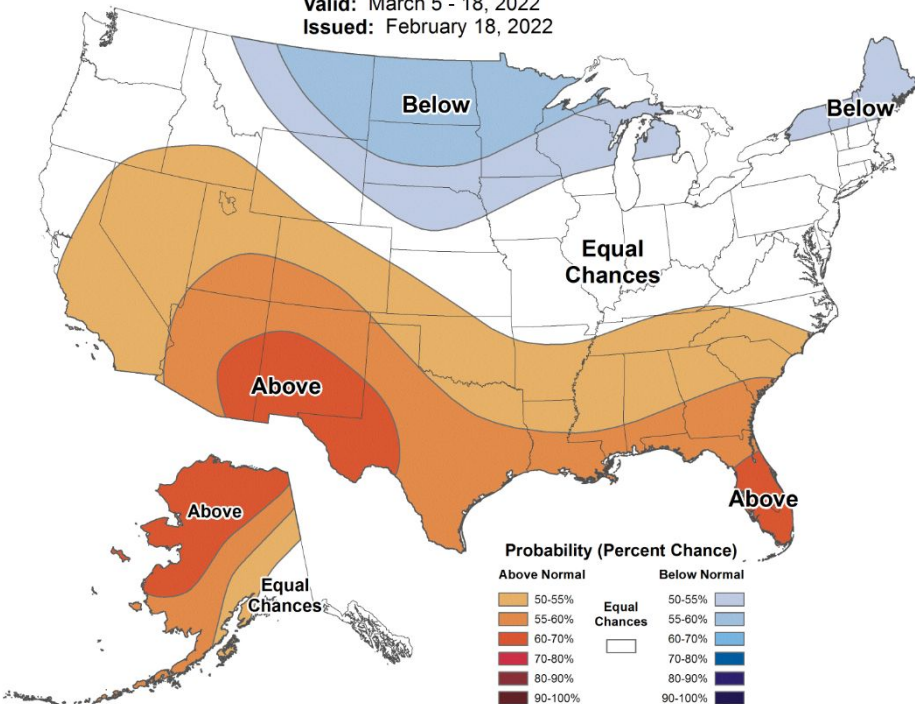


## Weeks 3-4 Temperature Outlook



Valid: March 5 - 18, 2022

Issued: February 18, 2022

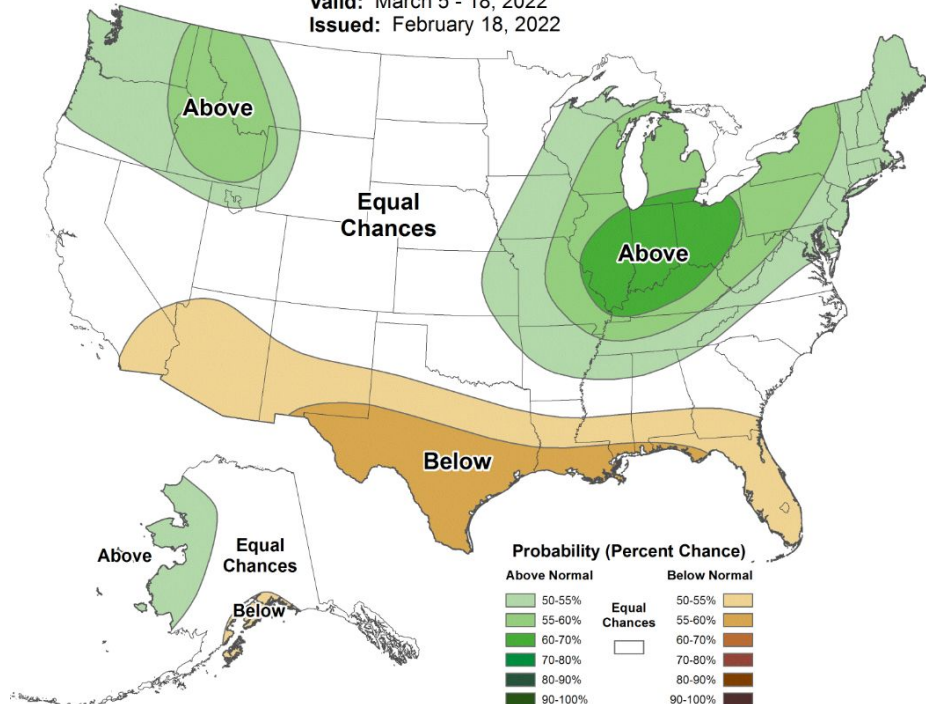


## Weeks 3-4 Precipitation Outlook



Valid: March 5 - 18, 2022

Issued: February 18, 2022



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# Looking at the March Forecast

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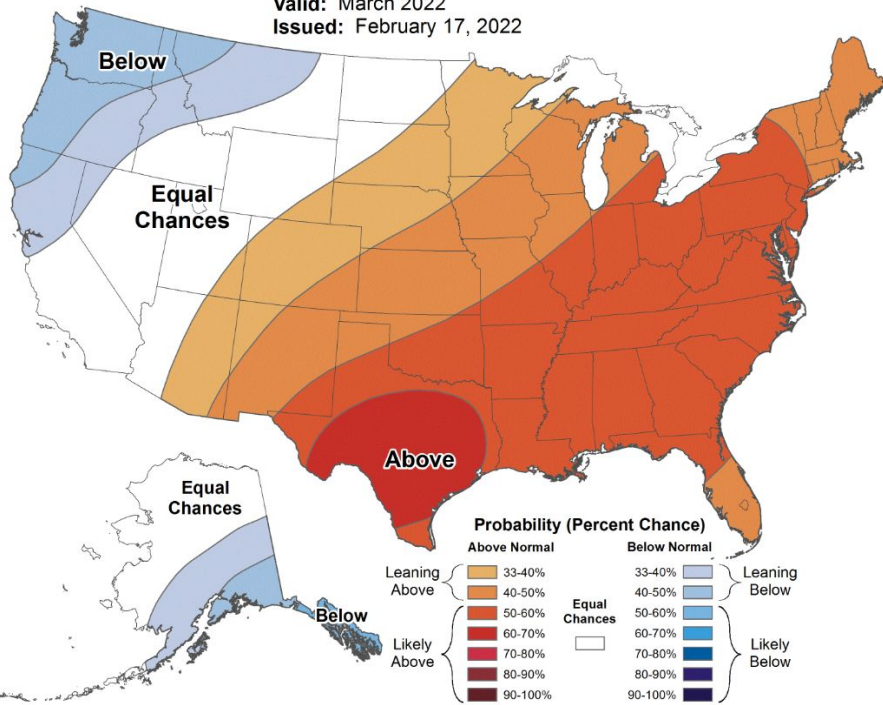
More Likely A Warmer and Drier Than Normal March



## Monthly Temperature Outlook

Valid: March 2022

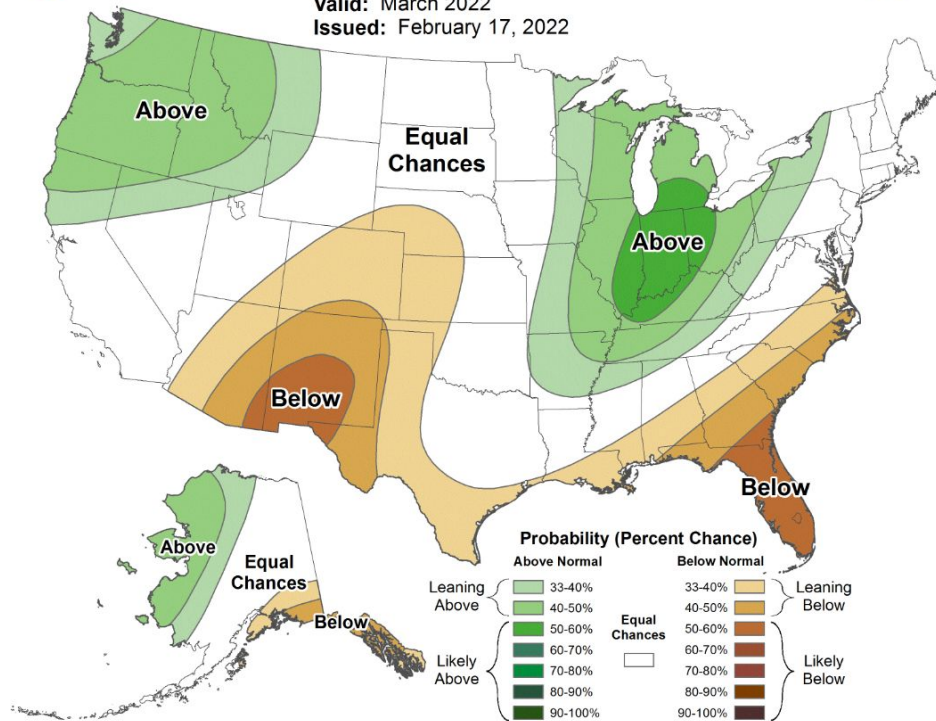
Issued: February 17, 2022



## Monthly Precipitation Outlook

Valid: March 2022

Issued: February 17, 2022



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# Looking at the 3 Month Forecast

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More Likely A Warmer and Drier Than Normal Period March Through May

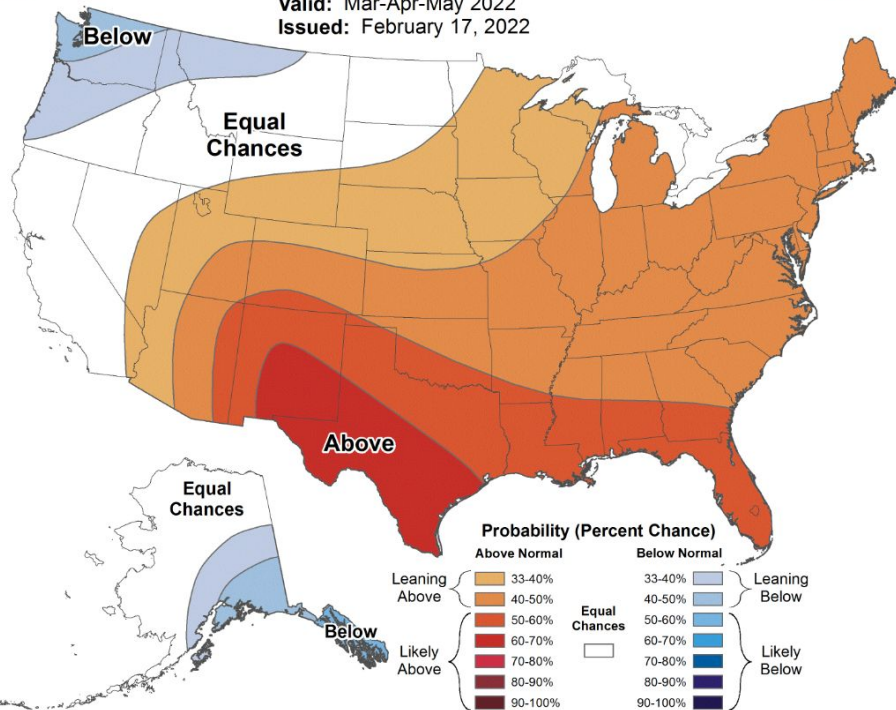


## Seasonal Temperature Outlook



Valid: Mar-Apr-May 2022

Issued: February 17, 2022

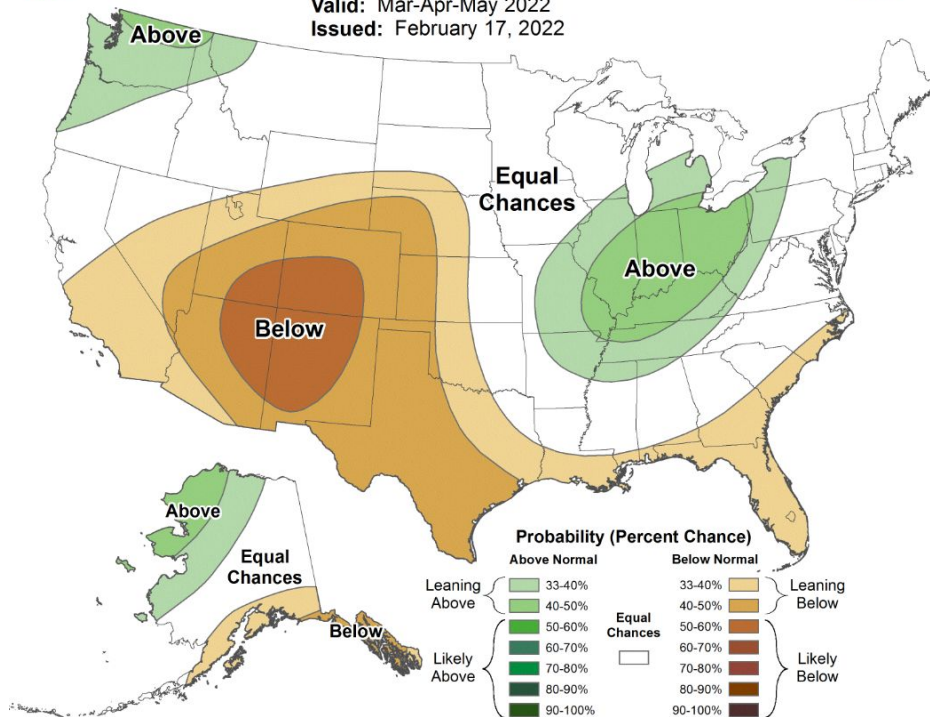


## Seasonal Precipitation Outlook



Valid: Mar-Apr-May 2022

Issued: February 17, 2022



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